ABSTRACT OF THE DISCLOSURE

A video signal processing apparatus processes an input video signal for displaying an image based on the video signal. Detected is a gradation level of the input video signal. A color saturation level of the input video signal is depressed in a predetermined color saturation level range only when the detected gradation level is located in a predetermined gradation level range. A first input video signal having a first gradation level (or number of bits) is converted into a second video signal having a second gradation level (or number of bits) that is lower (or smaller) than first gradation level (or number of bits), for displaying an image based on the input video signal. Error data is generated in response to a data portion of the first input video signal. The data portion corresponds to a difference between the first and the second gradation levels (or number of bits). The error data is obtained by multiplying the data portion by predetermined error diffusion coefficients according to pixel dots that surround a pixel dot composed of R(red)-, G(green)- and B(blue)-signal components of the first input video signal. At least one of the number of bits of the error diffusion coefficients for one of the R-, G- and B-signal components is different from the other number of bits of the error diffusion coefficients for the other signal components The generated error data is added to the first input video signal to convert the first input video signal into the second video signal. Reverse-gamma correction may be applied to the first input video signal before conversion.